ExSS V — FINAL PLENARY TALK SCHEDULE

Note: most sessions are 90 minutes with 6 speakers and all talks are 15 minutes (12+3) unless indicated otherwise. All talks are at the Te Pae Convention Centre in Auditorium 4.

SATURDAY 3/16

3:00 PM - Registration, Speaker and Poster Setup (Registration and Speaker Setup: Te Pae Crew Room; Posters: Te Pae Exhibit Hall 1)

5:00 PM - OPENING RECEPTION (at Te Pae)

SUNDAY 3/17

9:00 AM - Welcome and Intro Talks [Chair: Fred Rasio] - Note: 60 mins only.

Organizers welcome

Debra Fischer: Thirty Years of Exoplanets Natalie Batalha: Still Chasing Shadows — Transiting Exoplanets in the Era of JWST Anne-Marie Lagrange: Direct Imaging of Exoplanets

10:00 AM – BREAK – Note: 1 hour (this morning only)

11:00 AM - Early Results from JWST - I [Chair: Dave Charbonneau]

Björn Benneke: JWST/NIRSpec Transmission Spectroscopy of the Habitable-Zone Exo-Earth TRAPPIST-1g Jacqueline Faherty: JWST Identifies Methane Emission in a Cold Extrasolar World Peter Gao: The Transmission Spectrum of the Super-Puff Exoplanet Kepler-51b Observed by JWST Jonathan Fortney: The Surprising JWST Panchromatic Emission Spectrum of GJ 436b Shrishmoy Ray: The Direct Imaging Early Release Science (ERS) Program of JWST Olivia Lim: TRAPPIST-1 Atmospheric Reconnaissance with JWST — First Look at the Habitable-Zone Exoplanet TRAPPIST-1 f with NIRISS

12:30 PM - LUNCH

2:00 PM - Transiting Planets and TTVs [Chair: Sarah Ballard]

Samuel Yee: Demographic Results from the TESS Grand Unified Hot Jupiter Survey Ashley Chontos: 13 New TESS Planets and Homogeneous Properties for 21 Evolved Systems David Ehrenreich: Characterization of Three Sub-Neptune Worlds Straddling the Evaporation Valley in v2 Lupi Monika Lendl: 3.5 Years of Observing Exoplanet Day Sides with CHEOPS Diana Dragomir: Two Cool TESS Giant Planets in Circular Orbits Daniel Yahalomi: Exploring the Orbital Landscape of Perturbing Planets in Single Planet Systems via TTVs

3:30 PM - BREAK

4:00 PM - Early Results from JWST - II [Chair: Natalie Batalha]

Karl Stapelfeldt: Dust Settling and Grain Evolution in Edge-on Protoplanetary Disks — A JWST Broadband Imaging Survey Lisa Dang: A Hell of a Phase Curve — Mapping the Surface and Atmosphere of a Lava Planet Kevin Stevenson: Charting the Cosmic Shoreline with JWST Michael Zhang: Potential Detections of M-dwarf Rocky Planet Atmospheres, and a Trend in Atmosphere Occurrence Sebastian Zieba: Characterization of the Atmospheres and Surfaces of the Rocky Exoplanets TRAPPIST-1c and LHS3844b with MIRI Thomas Beatty: The Detection of Multiple Molecular Species in the Atmospheres of a Sub-Neptune and Super-Neptune

MONDAY 3/18

8:30 AM - RV and Extreme Precision RV [Chair: Debra Fischer]

Lauren Weiss: The Kepler Giant Planet Search – A Decade of Kepler Planet Host Radial Velocities from W. M. Keck Observatory

Lily Zhao: The Extreme Stellar Signals Project

Eric Ford: Evaluating Strategies for Extremely Precise Radial Velocity Measurements with the Sun

Andrew Cameron: The Sun as a Star Seen through Planet-hunting Instruments

Gudmundur Stefansson: An Extreme Test Case for Planet Formation - A Close-in Neptune Orbiting a Very Low-mass Star

Ryan Rubenzahl: Hot Jupiter Formation Clues from Three Extreme Solar Systems with the Keck Planet Finder

10:00 AM - BREAK

10:45 AM - Early Results from JWST - III [Chair: Emily Rauscher]

Jens Kammerer: JWST High-contrast Imaging of the Emblematic beta Pictoris System — A Cat's Tail in the Disk and Clouds in the Planet Atmosphere Luis Welbanks: The First Full Broadband Transmission Spectrum of an Exoplanet — The Chemistry of WASP-39b from 0.5 to 12 µm with JWST Pa Chia Thao: Probing the Atmosphere of the 17 Myr Gas Giant HIP 67522b Using JWST

Amélie Gressier: JWST's 0.6 to 5 μ m Transmission Spectrum of the Neptune-like Planet HAT-P-26b

Nicole Wallack: First Results from the JWST COMPASS (Compositions of Mini-Planet Atmospheres for Statistical Study) Program Renyu Hu: A CO2/CO-rich Atmosphere on the Rocky Exoplanet 55 Cnc e

12:15 PM - LUNCH

2:00 PM - Direct Imaging [Chair: Anne-Marie Lagrange]

Masayuki Kuzuhara: Subaru/SCExAO Direct Imaging Survey for Substellar Companions around Accelerating Nearby Stars Thomas Vandal: From HR 8799 to Y-dwarf Binaries — Understanding Planet Formation across the Stellar IMF with JWST Interferometry Jason Wang: The Roman Coronagraph Instrument — Pathway to Imaging Reflected Light Planets and Habitable Worlds Melanie Rowland: Protosolar D/H Abundance in the Coldest Brown Dwarf Melodie Kao: Resolved Magnetospheric Imaging of an Extrasolar Jovian Radiation Belt Analog Brendan Bowler: Spin-Orbit Angles Beyond 10 AU — Clues about the Formation of Imaged Planets and Brown Dwarfs

3:30 PM - BREAK

4:00 PM - Star-Planet Interactions, Ultra-Hot Worlds [Chair: Heather Knutson] - Note: 105 mins (7 talks), ending at 5:45 PM.

Babatunde Akinsanmi: Probing the Tidal Deformation and Atmosphere of WASP-12b from Phase Curve Observations Evgenya Shkolnik: Space Weather in Exoplanetary Systems — Learning from the Sun through Solar Flare and Coronal Mass Ejection Studies Moira Jardine: All Talk and No Action — Coronal Mass Ejections from M Dwarfs Rena Lee: Confirmation of TOI-6324 b — Mass Measurement of an Earth-sized USP with the Keck Planet Finder Jonas Biren: Characterizing Lava Worlds — Critical Laboratory Work for Observations Maggie Thompson: Experimental and Numerical Constraints on the Masses and Compositions of Rocky Exoplanet Atmospheres Eugene Chiang: Chaotic Winds from a Dying World: a Simple Map to Evolve Planetary Atmospheres

7:00 PM - CONFERENCE BANQUET (at Te Pae)

TUESDAY 3/19

8:30 AM - Formation and Demographics - I [Chair: Eric Ford]

Charles Law: Chemical Signatures of Embedded Protoplanets in Planet-forming Disks Kiersten Boley: The First Evidence of a Metallicity Cliff in the Formation of Super-Earths Casey Brinkman: Rocky Planet Compositions Do Not Strongly Depend on Stellar Abundances Kristo Ment: Terrestrial Planets Vastly Outnumber Sub-Neptunes and Gas Giants Around Mid-to-Late M Dwarfs Gregory Gilbert: A Break in the Exoplanet Eccentricity Distribution at 3 Earth radii and Elevated Eccentricities for Planets in the Radius Valley Shreyas Vissapragada: Planets in the Neptune Desert are "Hot Jupiters Gone Wrong"

10:00 AM - BREAK

10:45 AM - Planets around White Dwarfs [Chair: Steinn Sigurdsson] - Note: 75 mins (5 talks), ending at noon.

Ryan MacDonald: A JWST Transmission Spectrum of a White Dwarf Exoplanet Sydney Jenkins: Thermal Emission from the First Giant Planet Transiting a White Dwarf Andrew Vanderburg: The MIRI Exoplanets Orbiting White Dwarfs (MEOW) Survey — Early Results and Planet Candidates Sihao Cheng: The Occurrence of Giant Planets Orbiting B Stars Tim Cunningham: White Dwarfs Accreting Planetary Material Determined from X-ray Observations

12:00 PM - LUNCH (provided) and POSTER VIEWING

Tuesday afternoon free

7:00 PM — Public Lecture by Lisa Kaltenegger: "Searching for Alien Earths: Newest Insights and Adventures" (at Turanga Central Library)

WEDNESDAY 3/20

8:30 AM - Formation and Demographics - II [Chair: Lauren Weiss]

Christophe Pinte: First Results from the ALMA Planet Hunting Campaign — The exoALMA Large Program Sharon Wang: The Magellan-TESS Survey: Holistic Characterization of Small Planets Stephen Schmidt: The Extremes of the Exoplanet Age Distribution Emily Pass: Low-Mass M Dwarfs Lack Jupiter Analogs Joseph Rodriguez: Hot Jupiters with Friends as a Guide for Planetary Evolution Angharad Weeks: Younger Stars Host Denser Rocky Planets

10:00 AM - BREAK

10:45 AM - Dynamics, Obliquities, and Tides [Chair: Gummi Stefansson]

Sarah Millholland: Empirical Constraints on Tidal Dissipation in Exoplanet Host Stars Cristobal Petrovich: Aligned and Eccentric Close-in Gas Giants — An Emerging Population and their Possible Origins Jiayin Dong: Deciphering Origins of Close-in Gas Giants through Stellar Obliquity Distribution Hagai Perets: Photometric-only Measurements of Stellar Obliquities for Tens of Thousands of Stars and Exoplanet Systems using Machine Learning Gongjie Li: Day-Night and Seasonal Variations for Planets in Compact Systems Michael Poon: Leaning Sideways — VHS 1256-1257b is a Super-Jupiter with a Uranus-like Obliquity

12:15 PM - LUNCH

2:00 PM - 0, 2, 3, N stars [Chair: Melinda Soares-Furtado]

Naoki Koshimoto: Free-floating Planet Mass Function from the MOA-II 9-year Survey toward the Galactic Bulge Malena Rice: A Bimodal Orbital Geometry Distribution for Exoplanet-Hosting Multi-Star Systems Elise Evans: Orbital Architectures of Triple-star Systems that Host Transiting Planets Kendall Sullivan: Revealing Planet Formation With Planets in Binary Star Systems — Close Binaries May Suppress sub-Neptunes Adam Kraus: The Demographics of Planet Survival in Binary Star Systems Jessie Christiansen: Understanding the High Occurrence Rate of Hot Sub-Neptunes at Young and Intermediate Ages

3:30 PM - BREAK

4:00 PM - Planet Formation (and Destruction) Theory [Chair: Shigeru Ida]

Doug Lin: Prospects of Rogue Planets around Supermassive Black Holes at the Heart of Galaxies Eve Lee: Linking the Beginning and the End of Planet Formation using Ringed Disks Konstantin Batygin: The Origin of Universality in the Inner Edges of Planetary Systems Diego Munoz: Swift Alignment of Young Eccentric Orbits — Leveraging Warm Jupiter Dynamics to Probe Tidal Dissipation in Stars Kyle Kremer: Probing the Survival of Planetary Systems in Star Clusters with Tidal Disruption Events John Forbes: The Tidal Streams of Interstellar Objects

5:30 PM - DINNER BREAK, followed by special evening session:

7:30 PM - Astronomy and Aerospace in Aotearoa [Chair: Karen Pollard] - Note: 90 mins (three 30-min talks), ending at 9 PM.

Michele Bannister: From Antarctica to Space — Highlights of Astronomical Research across Aotearoa Victoria Campbell: Tātai Aroraki — Māori Astronomy and the Matariki Public Holiday Jenny Blackburne: Aerospace Industry in New Zealand

THURSDAY 3/21

8:30 AM - Habitability, Biosignatures, Technosignatures [Chair: Lisa Kaltenegger]

Tiffany Kataria: Assessing Conditions for the Origin of Life on Exoplanets Joshua Krissansen-Totton: The Loss of Primary Atmospheres Does Not Preclude Habitability Nikku Madhusudhan: The Hycean Paradigm in the Search for Life Victoria Meadows: The Feasibility of Detecting Biosignatures in the TRAPPIST-1 Planetary System with JWST Ligia Fonseca Coelho: Colors as a Tool to Search for Life in the Cosmos — Purple is the New Green Ravikumar Kopparapu: The Science of Technosignatures

10:00 AM - BREAK

10:45 AM - Atmospheres and Interiors of Giant Planets [Chair: Jayne Birkby]

Stefan Pelletier: A Giant Planet that Formed with More Ices than Rocks

Diana Powell: Spatially Resolved Weather on Hot Jupiters Louis-Philippe Coulombe: A Simultaneous Reflected-light and Thermal Emission Spectroscopic Phase Curve of an Exo-Neptune Julia Victoria Seidel: The Biggest Eye on the Sky — The Time-resolved Winds of WASP-121b in ESPRESSO's 4UT Mode Julie Inglis: Blue Skies and Glass Rain — Silicate Clouds on the Dayside of HD 189733 b Yamila Miguel: The Next-generation Models for Giant Exoplanet Interiors in the JWST Era

12:15 PM - LUNCH

2:00 PM — Atmospheres and Interiors of Terrestrial Planets and Sub-Neptunes [Chair: Yamila Miguel]

David Charbonneau: The Active Lifetimes of Low-mass Stars and the Implications for the Atmospheres of their Terrestrial Worlds René Doyon: Atmospheric Characterization of the Temperate Planet LHS1140b with JWST/NIRISS - Is LHS1140b a Mini-Neptune or a Water World? Caroline Piaulet: Revealing the Nature of Small-planet Atmospheres — JWST Tests the Water World Hypothesis for GJ 9827d Pierre-Alexis Roy: JWST Reveals Abundant Methane and Depleted Carbon Dioxide on the Temperate sub-Neptune LP791-18c Kazumasa Ohno: JWST/NIRSpec Transmission Spectrum of the Hazy Sub-Neptune GJ1214 b Hilke Schlichting: The Atmosphere-Interior Connection — What Recent JWST Observations Reveal about the Interiors of Sub-Neptunes

3:30 PM - BREAK

4:00 PM - The Future [Chair: Sarah Millholland] - Note: 120 mins, with closing reception following immediately at 6 PM.

Jayne Birkby: Into the Red — Opening up the M-band for High-resolution Spectroscopic Characterisation of Exoplanet Atmospheres Scott Gaudi: Extreme Solar Systems with Roman — Solar System Analogs, Low-mass Free-floating Planets, Giant Moons, and Circumbinary Planets Natalia Rektsini: Hunting Cold Planets — Breaking the Low-mass Planet Detection Limit with Euclid and Roman Melinda Soares-Furtado: Unveiling Transiting Exosatellites, Moons, and Planets in the Orion Nebula Cluster Knicole Colon: NASA's Pandora SmallSat Mission — Multiwavelength Characterization of Exoplanets and their Host Stars Lisa Kaltenegger: A New View of Rocky Exoplanets Daniel Huber: The Best Stars for Directly Imaging Mature Exoplanets from Space

Didier Queloz: A Tale of Two Centres Addressing the Topic of Life in the Universe

6:00 PM - CLOSING RECEPTION (At Christchurch Town Hall)
